Senior Researcher – Biomedical Theme

SAE- 13 IPIC Senior Researcher – Biomedical Theme

Contract: Full Time/Fixed Term

The successful candidate will join the Irish Photonics Integration Centre (IPIC), Ireland's centre of excellence for research and innovation in photonics, as it undergoes a rapid expansion programme to grow to 220 researchers, to become one of Europe's top photonics integration research centres. As part of a new centre award, four research multi-disciplinary themes are launched, each of them based on more than 10 dedicated researchers. The daily coordination of the Biomedical theme will be conducted by the successful candidate. The position will offer the opportunity for you to:

- Complete a cutting edge research project in one of the areas listed below
- Collaborate with our 17 Principal Investigators and their research teams
- Access Tyndall's world-class research facilities
- Publish in leading journals and present at top international conferences
- Complete advanced training courses in photonics
- Develop translational skills, e.g. project management, communication & dissemination and entrepreneurial skills
- Connect with our global network of 30 industry and more than 100 academic partners
- Join a diverse community of young researchers from across the world and participate in one of our vibrant student chapters

Our research in the Biomedical Theme, led by IPIC Deputy Director Stefan Andersson-Engels, will address the development of ultra-compact image sensor technologies to advance medicine in a wide range of clinical specialities.

We are now seeking the senior postdoc researcher to work full time on the Theme to coordinate the research programme that cuts across 5 PIs, including 3 Postdocs and 10 PhDs, on the day-to-day basis. The challenges for the theme ranges aspects of developing an ultra-compact image sensor platform, optical powering and communication with the sensor, packaging the device and its specifically developed integrated circuits as compact as possible, as well as translating the device into medical applications. The specific research for the position is all around the image sensor.

The position will be based at Tyndall National Institute, University College Cork. If you are interested in helping us achieve our ambition, complete and submit an application form and motivation letter.

Responsibilities

The candidate is expected to be creative, self-motivated, and should inspire group members to work efficiently in a friendly atmosphere and collaborative environment. This is a key position, of central importance for the success of building this new biomedical theme at IPIC. The main technical area of expertise will most likely be within micro camera technology. The expertise area of research might also be within microelectronics, or other fields related to the development of micro-image sensors specifically developed for biomedical applications.

Key responsibilities will include

- Take a lead on day-to-day research challenges and team management in the ambitious theme project.
- Manage the operational development of the biomedical theme at IPIC in line with the IPIC strategy and the Tyndall Strategic plan.
- Lead the management of research capabilities, laboratories and associated infrastructure in order to successfully execute research objectives.
- Support the establishment, management and development of the research team (staff, post-docs and students) and provide mentorship, coaching and supervision as appropriate
- Contribute to the engagement on intellectual property activities in partnership with the Office of Technology Transfer
- Contribute to the development of national and international collaborative research networks and create new synergies/collaborations between Tyndall and other research third party bodies
- Leverage existing projects and research facilities at Tyndall in order to identify new research opportunities and industrial projects
- Independently identify research objectives and potential funding sources and prepare and write bids for funding proposals
- Establish and maintain key industrial partnerships, including management and delivery of commercially-focused projects
- Disseminate the outcomes of the research, including peerreviewed academic publications and presentations at conferences of international standing
- Be able to participate in undergraduate teaching as required
- Ensure all activities are compliant with the Tyndall Quality Management system
- Ensure all activities are compliant with the required Health and Safety standards
- Carry out any additional duties as may reasonably be required within the general scope and level of the post

Essential Criteria

- The successful candidate must have a Ph.D. in one of the following disciplines: physics, biomedical engineering, electrical engineering, or a related field
- Typically with 6 years relevant post-doctoral experience
- Track record of high quality peer reviewed publications, as evidenced by h-index
- Experience of writing of competitive research proposals, national and EU
- The candidate must demonstrate an academic record of scientific excellence, independent research, and good writing and communication skills
- Strong theoretical and experimental skills and hands-on experience with micro optical systems and cameras
- Experienced in working in interdisciplinary research teams
- Proven management skills

Desirable Criteria

- Experiences of relevance for the theme, in particular camera chip design and will demonstrate an aptitude to develop key skills in the other centrally important areas for the theme, including optical communication, optical powering, micro-LED research, optical packaging, and biomedical applications of micro-cameras.
- The applicant should be eligible to apply for a SFI starting investigator research award. He or she will demonstrate a desire to develop a long term research career in Ireland, and will be committed to ensuring that research outputs will be exploited to the benefit of the Irish economy.
- Contributed in supervision of Postgraduate students and undergraduate students
- Establishment and maintenance of key academic, medical and industrial partnerships

- Management of commercial development projects
- Financial management of awards
- Development and implementation of a multi-disciplinary research programme
- Identification and procurement of research infrastructure
- Management and design of research laboratories
- Experience of holding a teaching position in a 3rd level institution could be an advantage.
- Knowledge transfer and commercialisation experience (highly desirable).

Appointment may be made on the Senior Postdoctoral Researcher Scale €46,337 - €49,048. Salary placement on appointment will be in accordance with public sector pay policy.

For further information and informal enquiries please contact Prof Stefan Andersson-Engels at stefan.andersson-engels@tyndall.ie

Application Instructions

Step 1 - Click here to download and complete the Application form and indicate SAE-13 as the Job Reference

Step 2 – Return the completed Application form, together with your CV and motivation letter to careers@tyndall.ie.

Handwritten forms will not be accepted.

Please note that Garda vetting and/or an international police clearance check may form part of the selection process.

The University, at its discretion, may undertake to make an additional appointment(s) from this competition following the conclusion of the process.

Please note that an appointment to posts advertised will be dependent on University approval, together with the terms of the employment control framework for the higher education sector.

At this time, Tyndall National Institute does not require the assistance of recruitment agencies.